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PATENT APPLICATION

ABSTRACT OF THE DISCLOSURE

1 Genetically-modified T cells with enhanced survival *in vivo* are obtained by
2 transducing T cells with a recombinant polynucleotide encoding a fusion protein comprising a
3 single chain Fv antibody (comprising the variable regions of the heavy and light chains of a
4 selected antibody such as an anti-G_{D2} antibody) linked to CD28 receptor. T cells expressing this
5 recombinant fusion protein exhibit enhanced survival when reintroduced to an *in vivo*
6 environment.. These T cells can be used to induce an immune response to cells, particularly tumor
7 cells, when express the antigen for which the antibody is specific. Cells expressing recombinant
8 fusion proteins according to the invention can also be used for *in vitro* purging of stem cells/bone
9 marrow and for *in vivo* targeting of tumor cells and other antigen-bearing cells for purposes of
0 imaging.

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